

Claims

What is claimed is:

1. A method of controlling a terminal in a communication system, the method comprising the steps of:

5 generating a command symbol representative of a plurality of commands in accordance with a terminal protocol supported by a switch of the system; and

transmitting the command symbol to a terminal having a valid command space which is less than a full command space of the terminal protocol, wherein the terminal decodes the symbol and executes the corresponding plurality of commands.

10 2. The method of claim 1 wherein the terminal protocol is a wired terminal protocol, and the terminal is a wireless terminal.

15 3. The method of claim 2 further including the steps of:

resizing a command space associated with the wired terminal protocol to generate a reduced command space suitable for use with the wireless terminal;

generating a representation in which a first portion of the reduced command space is correlated with a second portion of the reduced command space; and

20 assigning command symbols to valid entries in the representation, such that a given one of the command symbols uniquely identifies a particular set of commands in the reduced command space.

25 4. The method of claim 2 wherein the wired terminal protocol utilizes a field-based fixed-length packet format including a header portion and a command portion.

5. The method of claim 4 wherein the header portion includes at least one of a primary switchhook indicator, a secondary switchhook indicator, an extended protocol indicator and a test indicator.

6. The method of claim 4 wherein the command portion includes a command pointer identifying a category of commands and at least one command data segment identifying a particular command in a given one of the categories of commands.

5        7. The method of claim 5 wherein a given one of the command symbols specifies commands associated with at least the primary switchhook and the test indicator.

8. The method of claim 6 wherein a given one of the command symbols specifies commands associated with at least a portion of the command pointer and the command data segment.

10        9. The method of claim 3 wherein the step of generating a representation includes forming a tabular representation in which specific values of bits in the first portion of the reduced command space correspond to columns, and in which specific values of bits in the second portion of the reduced command space correspond to rows.

15        10. The method of claim 9 wherein the bits in the first portion of the reduced command space include at least one bit for each of a primary switchhook, a test indicator, and a command pointer.

20        11. The method of claim 9 wherein the bits in the second portion of the reduced command space include a plurality of command data segment bits.

25        12. An apparatus for controlling a terminal in a communication system, comprising:  
            a memory, associated with a switch of the system, for storing a set of command symbols, wherein each of at least a subset of the command symbols is representative of a plurality of commands in accordance with a terminal protocol supported by the switch; and  
            a processor coupled to the memory and operative to direct the transmission of a particular one of the command symbols to a terminal having a valid command space which is less

than a full command space of the terminal protocol, wherein the terminal decodes the symbol and executes the corresponding plurality of commands.

13. The apparatus of claim 12 wherein the terminal protocol is a wired terminal protocol,  
5 and the terminal is a wireless terminal.

14. The apparatus of claim 13 wherein the set of command symbols is generated by resizing  
a command space associated with the wired terminal protocol to generate a reduced command space  
suitable for use with the wireless terminal, generating a representation in which a first portion of the  
10 reduced command space is correlated with a second portion of the reduced command space, and  
assigning command symbols to valid entries in the representation, such that a given one of the  
command symbols uniquely identifies a particular set of commands in the reduced command space.

15 15. The apparatus of claim 13 wherein the wired terminal protocol utilizes a field-based  
fixed-length packet format including a header portion and a command portion.

20 16. The apparatus of claim 15 wherein the header portion includes at least one of a primary  
switchhook indicator, a secondary switchhook indicator, an extended protocol indicator and a test  
indicator.

17. The apparatus of claim 15 wherein the command portion includes a command pointer  
identifying a category of commands and at least one command data segment identifying a particular  
command in a given one of the categories of commands.

25 18. The apparatus of claim 16 wherein a given one of the command symbols specifies  
commands associated with at least the primary switchhook and the test indicator.

19. The apparatus of claim 17 wherein a given one of the command symbols specifies  
commands associated with at least a portion of the command pointer and the command data segment.

20. The apparatus of claim 14 wherein the representation comprises a tabular representation in which specific values of bits in the first portion of the reduced command space correspond to columns, and in which specific values of bits in the second portion of the reduced command space correspond to rows.

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21. The apparatus of claim 20 wherein the bits in the first portion of the reduced command space include at least one bit for each of a primary switchhook, a test indicator, and a command pointer.

10 22. The apparatus of claim 20 wherein the bits in the second portion of the reduced command space include a plurality of command data segment bits.

15 23. The apparatus of claim 13 wherein the processor comprises a central processing unit of the switch.

20 24. The apparatus of claim 13 wherein at least one of the memory and the processor are associated with a port card in the switch of the system.

25 25. An apparatus comprising:

a system terminal operative to receive command symbols from a system switch, each of at least a subset of the command symbols being representative of a plurality of commands in accordance with a terminal protocol supported by the switch, wherein the terminal has a valid command space which is less than a full command space of the terminal protocol, and wherein the terminal decodes a given one of the symbols and executes the corresponding plurality of commands.

25 *Subj* 26. An article of manufacture comprising:  
a machine-readable storage medium storing one or more programs for implementing a method of controlling a terminal in a communication system, wherein the one or more programs when executed generate command symbols, each of at least a subset of the command symbols

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representative of a plurality of commands in accordance with a terminal protocol supported by a switch of the system, such that a given one of the symbols, when transmitted to a terminal having a valid command space which is less than a full command space of the terminal protocol, directs the terminal to execute the corresponding plurality of commands.

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